

SDG COVER PAGE

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011
Lab Code: ACE Case No.: 51698 MA No.: _____ SDG No.: MBHCX5
SOW No. : SFAM01.1

| EPA Sample No. | Lab Sample Id | ICP-AES | Analysis Method | | |
|----------------|-----------------|----------|-----------------|----------|----------|
| | | | ICP-MS | Mercury | Cyanide |
| <u>MBHCX5</u> | <u>P4496-01</u> | <u>X</u> | <u></u> | <u>X</u> | <u>X</u> |
| <u>MBHCY6</u> | <u>P4496-02</u> | <u>X</u> | <u></u> | <u>X</u> | <u>X</u> |
| <u>MBHCY7</u> | <u>P4496-03</u> | <u>X</u> | <u></u> | <u>X</u> | <u>X</u> |
| <u>MBHDO5</u> | <u>P4496-04</u> | <u>X</u> | <u></u> | <u>X</u> | <u>X</u> |
| <u>MBHDO6</u> | <u>P4496-05</u> | <u>X</u> | <u></u> | <u>X</u> | <u>X</u> |
| <u>MBHZC7</u> | <u>P4496-06</u> | <u>X</u> | <u></u> | <u>X</u> | <u>X</u> |
| <u>MBHZC8</u> | <u>P4496-07</u> | <u>X</u> | <u></u> | <u>X</u> | <u>X</u> |
| <u>MBHZC8D</u> | <u>P4496-08</u> | <u>X</u> | <u></u> | <u>X</u> | <u>X</u> |
| <u>MBHZC8S</u> | <u>P4496-09</u> | <u>X</u> | <u></u> | <u>X</u> | <u>X</u> |

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the SDG Narrative. All edits and manual integrations have been peer-reviewed. Release of the data contained in this hardcopy Complete SDG File and in the electronic data submitted has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: _____
Date: _____ Title: _____

68HERH20D0011

SDG # MBHCX5

USEPA CLP COC (LAB COPY)

CHAIN OF CUSTODY RECORD

No: 2-102224-0030-5005-04

Date Shipped: 10/22/2024

Lab: Alliance Technical Group LLC

Carrier Name: FedEx

Case #: 51698

Lab Contact: Mohammad Ahmed

Airbill No: 779427640386

Cooler #: 4 of 5

Lab Phone: 908-789-8900

| Sample Identifier | CLP Sample No. | Matrix/Sampler | Coll. Method | Analysis/Turnaround (Days) | Tag/Preservative/Bottles | Location | Collection Date/Time | For Lab Use Only |
|--------------------|----------------|----------------|--------------|----------------------------|--------------------------|-----------|----------------------|------------------|
| P065-SS024-1218-02 | MBHCX4 | Soil/ START | Grab | Metals + Hg + Cn(180) | Q (4 C) (1) | Boring 24 | 10/16/2024 10:00 | |
| P065-SS024-6072-01 | MBHCX7 | Soil/ START | Grab | Metals + Hg + Cn(180) | Y (4 C) (1) | Boring 24 | 10/16/2024 11:40 | |
| P065-SS024-7284-01 | MBHCX8 | Soil/ START | Grab | Metals + Hg + Cn(180) | Y (4 C) (1) | Boring 24 | 10/16/2024 11:50 | |
| P065-SS024-8496-01 | MBHCX9 | Soil/ START | Grab | Metals + Hg + Cn(180) | Y (4 C) (1) | Boring 24 | 10/16/2024 12:00 | |
| P065-SS025-1824-01 | MBHDO0 | Soil/ START | Grab | Metals + Hg + Cn(180) | Q (4 C) (1) | Boring 25 | 10/18/2024 15:00 | |
| P065-SS025-2430-01 | MBHDO1 | Soil/ START | Grab | Metals + Hg + Cn(180) | Q (4 C) (1) | Boring 25 | 10/18/2024 15:05 | |
| P065-SS025-3042-01 | MBHDO2 | Soil/ START | Grab | Metals + Hg + Cn(180) | U (4 C) (1) | Boring 25 | 10/18/2024 15:10 | |
| P065-SS025-4254-01 | MBHDO3 | Soil/ START | Grab | Metals + Hg + Cn(180) | Y (4 C) (1) | Boring 25 | 10/18/2024 15:15 | |
| P065-SS025-5466-01 | MBHDO4 | Soil/ START | Grab | Metals + Hg + Cn(180) | Y (4 C) (1) | Boring 25 | 10/18/2024 15:20 | |
| P065-SS025-6678-01 | MBHDO5 | Soil/ START | Grab | Metals + Hg + Cn(180) | Y (4 C) (1) | Boring 23 | 10/18/2024 15:25 | ✓ |

Special Instructions: Please email results to s.sumbaly@westonsolutions.com and hector.rodriguez-cesani@westonsolutions.com. 21 day validated TAT.

Analysis Key: Metals + Hg + Cn=TAL Metals + Hg + Cn

Shipment for Case Complete? Y

Samples Transferred From Chain of Custody #

| Items/Reason | Relinquished by (Signature and Organization) | Date/Time | Received by (Signature and Organization) | Date/Time | Sample Condition Upon Receipt |
|--------------|--|-----------|--|---------------|-------------------------------|
| All Samples | <i>[Signature]</i> / Start | 10-23-24 | <i>[Signature]</i> Fed Ex | 10-23-24 0850 | 19C in gun #1 |
| | | | | | custody seals intact |
| | | | | | Temp OK - present |

No: 2-102224-0030-5005-04

Lab: Alliance Technical Group LLC
Lab Contact: Mohammad Ahmed
Lab Phone: 908-789-8900




| Sample Identifier | CLP Sample No. | Matrix/Sampler | Coll. Method | Analysis/Turnaround (Days) | Tag/Preservative/Bottles | Location | Collection Date/Time | For Lab Use Only |
|--------------------|----------------|----------------|--------------|----------------------------|--------------------------|-----------|----------------------|------------------|
| P065-SS025-7890-01 | MBHDO6 | Soil/ START | Grab | Metals + Hg + Cd(180) | Y (4 C) (1) | Boring 25 | 10/18/2024 15:30 | ✓ |
| P065-SS025-0006-01 | MBHZC7 | Soil/ START | Grab | Metals + Hg + Cd(180) | Y (4 C) (1) | Boring 25 | 10/18/2024 14:45 | ✓ |
| P065-SS025-0612-01 | MBHZC8 | Soil/ START | Grab | Metals + Hg + Cd(180) | Q (4 C) (1) | Boring 25 | 10/18/2024 14:50 | ✓ |
| P065-SS025-1218-01 | MBHZC9 | Soil/ START | Grab | Metals + Hg + Cd(180) | Q (4 C) (1) | Boring 25 | 10/18/2024 14:55 | ✓ |

Sample(s) to be used for Lab QC: P065-SS025-1218-01 Tag Q - Special Instructions: Please email results to s.sumbal@westonsolutions.com and vector.rodriguez-cesari@westonsolutions.com. 21 day validated TAT.

Shipment for Case Complete? Y

Samples Transferred From Chain of Custody #

Analysis Key: Metals + Hg + Cn=TAL Metals + Hg + Cn

| Items/Reason | Relinquished by (Signature and Organization) | Date/Time | Received by (Signature and Organization) | Date/Time | Sample Condition Upon Receipt |
|--------------|--|------------|--|-----------|-------------------------------|
| Al Samples |  Steven A. C. | 10/20/2010 |  Ferdy | 10-23-24 | 1-9°C |
| | | |  DA | 0850 | DA gun #1 |
| | | | | | custody seals intact |
| | | | | | Temp 31K - present |

FORM DC-1
SAMPLE LOG-IN SHEET

| | | |
|--|-----------------------|-------------------------------|
| Lab Name : Alliance Technical Group, LLC | | Page <u>1</u> of <u>2</u> |
| Received By (Print Name) <u>Cassanova Peña</u> | | Log-in Date 10/23/2024 |
| Received By (Signature) <u>[Signature]</u> | | |
| Case Number 51698 | SDG No. MBHCX5 | MA No. N/A |

| | |
|--|------------------------------------|
| Remarks: | |
| 1. Custody Seal (s) | Present, Intact |
| 2. Custody Seal Nos. | <u>n/a</u> |
| 3. Traffic Reports/Chain Of Custody Records | Present |
| 4. Airbill | Present |
| 5. Airbill No. and Shipping Container ID No. | <u>779427650012</u> <u>1</u> |
| 6. Shipping Container Temperature Indicator Bottle | Present |
| 7. Shipping Container Temperature | <u>2.2</u> Degree C |
| 8. Sample Condition | Intact |
| 9. Sample Tags Sample Tag Numbers | Absent Listed on Traffic Report |
| 10. Does information on Traffic Reports/Chain of Custody Records and Sample Tags agree ? | Yes |
| 11. Date Received at Lab | <u>10/23/2024</u> |
| 12. Time Received | <u>09:50</u> |

| | EPA Sample # | Aqueous/ Water Sample pH | Corresponding | | Remarks: Condition of Sample Shipment, etc. |
|----|--------------|-----------------------------|---------------|----------------|--|
| | | | Sample Tag # | Assigned Lab # | |
| 1 | MBHCX5 | 1.6,13 | E,F | P4496-01 | Intact |
| 2 | MBHCY6 | 1.6,13 | E,F | P4496-02 | Intact |
| 3 | MBHCY7 | 1.6,13 | E,F | P4496-03 | Intact |
| 4 | N/A | N/A | N/A | N/A | N/A |
| 5 | N/A | N/A | N/A | N/A | N/A |
| 6 | N/A | N/A | N/A | N/A | N/A |
| 7 | N/A | N/A | N/A | N/A | N/A |
| 8 | N/A | N/A | N/A | N/A | N/A |
| 9 | N/A | N/A | N/A | N/A | N/A |
| 10 | N/A | N/A | N/A | N/A | N/A |
| 11 | N/A | N/A | N/A | N/A | N/A |
| 12 | N/A | N/A | N/A | N/A | N/A |
| 13 | N/A | N/A | N/A | N/A | N/A |
| 14 | N/A | N/A | N/A | N/A | N/A |
| 15 | N/A | N/A | N/A | N/A | N/A |
| 16 | N/A | N/A | N/A | N/A | N/A |
| 17 | N/A | N/A | N/A | N/A | N/A |
| 18 | N/A | N/A | N/A | N/A | N/A |
| 19 | N/A | N/A | N/A | N/A | N/A |
| 20 | N/A | N/A | N/A | N/A | N/A |
| 21 | N/A | N/A | N/A | N/A | N/A |
| 22 | N/A | N/A | N/A | N/A | N/A |
| 23 | N/A | N/A | N/A | N/A | N/A |

* Contact SMO and attach record of resolution

| | |
|--------------------------------|-----------------------------|
| Reviewed By <u>[Signature]</u> | Logbook No. N/A |
| Date <u>10/23/24</u> | Logbook Page No. N/A |

FORM DC-1
SAMPLE LOG-IN SHEET

| | |
|--|---|
| Lab Name : Alliance Technical Group, LLC | Page <u>2</u> of <u>2</u> |
| Received By (Print Name) <u>Bongse Neson</u> | Log-in Date 10/23/2024 |
| Received By (Signature) <u>[Signature]</u> | |
| Case Number 51698 | SDG No. MBHCX5 MA No. N/A |

| | |
|--|------------------------------------|
| Remarks: | |
| 1. Custody Seal (s) | Present, Intact |
| 2. Custody Seal Nos. | <u>n/a</u> |
| 3. Traffic Reports/Chain Of Custody Records | Present |
| 4. Airbill | Present |
| 5. Airbill No. and Shipping Container ID No. | <u>779427640386</u> <u>2</u> |
| 6. Shipping Container Temperature Indicator Bottle | Present |
| 7. Shipping Container Temperature | <u>1.9</u> Degree C |
| 8. Sample Condition | Intact |
| 9. Sample Tags Sample Tag Numbers | Absent Listed on Traffic Report |
| 10. Does information on Traffic Reports/Chain of Custody Records and Sample Tags agree ? | Yes |
| 11. Date Received at Lab | <u>10/23/2024</u> |
| 12. Time Received | <u>09:50</u> |

| | EPA Sample # | Aqueous/ Water Sample pH | Corresponding | | Remarks: Condition of Sample Shipment, etc. |
|----|--------------|-----------------------------|---------------|----------------|--|
| | | | Sample Tag # | Assigned Lab # | |
| 1 | MBHDO5 | N/A | Y | P4496-04 | Intact |
| 2 | MBHDO6 | N/A | Y | P4496-05 | Intact |
| 3 | MBHZC7 | N/A | Y | P4496-06 | Intact |
| 4 | MBHZC8 | N/A | Q | P4496-07 | Intact |
| 5 | MBHZC8D | N/A | Q | P4496-08 | Intact |
| 6 | MBHZC8S | N/A | Q | P4496-09 | Intact |
| 7 | N/A | N/A | N/A | N/A | N/A |
| 8 | N/A | N/A | N/A | N/A | N/A |
| 9 | N/A | N/A | N/A | N/A | N/A |
| 10 | N/A | N/A | N/A | N/A | N/A |
| 11 | N/A | N/A | N/A | N/A | N/A |
| 12 | N/A | N/A | N/A | N/A | N/A |
| 13 | N/A | N/A | N/A | N/A | N/A |
| 14 | N/A | N/A | N/A | N/A | N/A |
| 15 | N/A | N/A | N/A | N/A | N/A |
| 16 | N/A | N/A | N/A | N/A | N/A |
| 17 | N/A | N/A | N/A | N/A | N/A |
| 18 | N/A | N/A | N/A | N/A | N/A |
| 19 | N/A | N/A | N/A | N/A | N/A |
| 20 | N/A | N/A | N/A | N/A | N/A |
| 21 | N/A | N/A | N/A | N/A | N/A |
| 22 | N/A | N/A | N/A | N/A | N/A |
| 23 | N/A | N/A | N/A | N/A | N/A |

* Contact SMO and attach record of resolution

| | |
|--------------------------------|-----------------------------|
| Reviewed By <u>[Signature]</u> | Logbook No. N/A |
| Date <u>10/23/24</u> | Logbook Page No. N/A |

FORM DC-2
COMPLETE SDG FILE (CSF) INVENTORY SHEET

| | | | |
|--------------|-------------------------------|---------|----------|
| LAB NAME | Alliance Technical Group, LLC | | |
| LAB CODE | ACE | | |
| CONTRACT NO. | 68HERH20D0011 | | |
| CASE NO. | 51698 | SDG NO. | MBHCX5 |
| MA NO. | | SOW NO. | SFAM01.1 |

All documents delivered in the Complete SDG File must be original documents where possible.
(Reference - Exhibit B Section 2.4)

| | PAGE NOS: | | CHECK | |
|--|-----------|----|-------|--------|
| | FROM | TO | LAB | REGION |
| 1. SDG Cover Page | 1 | 1 | ✓ | |
| 2. Traffic Report/Chain of Custody Record(s) | 2 | 4 | ✓ | |
| 3. Sample Log-In Sheet (DC-1) | 5 | 6 | ✓ | |
| 4. CSF Inventory Sheet (DC-2) | 7 | 9 | ✓ | |
| 5. SDG Narrative | 10 | 14 | ✓ | |
| 6. Communication Logs | 15 | 17 | ✓ | |
| 7. Percent Solids Log | 18 | 19 | ✓ | |

Analysis Forms and Data (ICP-AES)

| | | | | |
|--|----|-----|---|--|
| 8. Sample Analysis Data Forms (1A-OR, 1B-OR, and 1-IN) for each sample or sample analysis, laboratory QC as applicable | 20 | 26 | ✓ | |
| 9. Instrument raw data by instrument in analysis order | 27 | 912 | ✓ | |

Other Data

| | | | | |
|--|------|------|---|--|
| 10. Standard and Reagent Preparation Logs | 913 | 1098 | ✓ | |
| 11. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks | 1099 | 1102 | ✓ | |
| 12. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks | 1103 | 1126 | ✓ | |
| 13. Performance Evaluation (PE)/Proficiency Testing (PT) Sample Instructions | NA | NA | ✓ | |
| 14. Extraction Logs for TCLP and SPLP | NA | NA | ✓ | |
| 15. Raw GPC Data | NA | NA | ✓ | |
| 16. Raw Florisil Data | NA | NA | ✓ | |

Analysis Forms and Data (ICP-MS)

| | | | | |
|---|----|----|---|--|
| 17. Sample Analysis Data Forms (1A-OR, 1B-OR, and 1-IN) for each sample or sample analysis, laboratory QC as applicable | NA | NA | ✓ | |
| 18. Instrument raw data by instrument in analysis order | NA | NA | ✓ | |

Other Data

| | | | | |
|--|----|----|---|--|
| 19. Standard and Reagent Preparation Logs | NA | NA | ✓ | |
| 20. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks | NA | NA | ✓ | |
| 21. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks | NA | NA | ✓ | |
| 22. Performance Evaluation (PE)/Proficiency Testing (PT) Sample Instructions | NA | NA | ✓ | |

| | <u>PAGE NOS:</u> | | <u>CHECK</u> | |
|--|------------------|-----------|--------------|---------------|
| | <u>FROM</u> | <u>TO</u> | <u>LAB</u> | <u>REGION</u> |
| 23 . Extraction Logs for TCLP and SPLP | NA | NA | ✓ | |
| 24 . Raw GPC Data | NA | NA | ✓ | |
| 25 . Raw Florisil Data | NA | NA | ✓ | |

Analysis Forms and Data (Mercury)

| | | | | |
|--|------|------|---|--|
| 26 . Sample Analysis Data Forms (1A-OR, 1B-OR, and 1-IN) for each sample or sample analysis, laboratory QC as applicable | 1127 | 1133 | ✓ | |
| 27 . Instrument raw data by instrument in analysis order | 1134 | 1137 | ✓ | |

Other Data

| | | | | |
|---|------|------|---|--|
| 28 . Standard and Reagent Preparation Logs | 1138 | 1176 | ✓ | |
| 29 . Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks | 1177 | 1180 | ✓ | |
| 30 . Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks | 1181 | 1183 | ✓ | |
| 31 . Performance Evaluation (PE)/Proficiency Testing (PT) Sample Instructions | NA | NA | ✓ | |
| 32 . Extraction Logs for TCLP and SPLP | NA | NA | ✓ | |
| 33 . Raw GPC Data | NA | NA | ✓ | |
| 34 . Raw Florisil Data | NA | NA | ✓ | |

Analysis Forms and Data (Cyanide)

| | | | | |
|--|------|------|---|--|
| 35 . Sample Analysis Data Forms (1A-OR, 1B-OR, and 1-IN) for each sample or sample analysis, laboratory QC as applicable | 1184 | 1190 | ✓ | |
| 36 . Instrument raw data by instrument in analysis order | 1191 | 1195 | ✓ | |

Other Data

| | | | | |
|---|------|------|---|--|
| 37 . Standard and Reagent Preparation Logs | 1196 | 1229 | ✓ | |
| 38 . Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks | 1230 | 1233 | ✓ | |
| 39 . Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks | 1234 | 1237 | ✓ | |
| 40 . Performance Evaluation (PE)/Proficiency Testing (PT) Sample Instructions | NA | NA | ✓ | |
| 41 . Extraction Logs for TCLP and SPLP | NA | NA | ✓ | |
| 42 . Raw GPC Data | NA | NA | ✓ | |
| 43 . Raw Florisil Data | NA | NA | ✓ | |

Additional

44. EPA Shipping/Receiving Documents

Airbill (No. of Shipments 2)

Sample Tags

Sample Log-In Sheet (Lab)

45. Misc. Shipping/Receiving Records (list all individual records)

46. Internal Lab Sample Transfer Records and Tracking Sheets
(describe or list)

47. Other Records and related Communication Logs
(describe or list)

48. Comments:

Completed by:
(CLP Lab)

(Signature)

Nimisha Pandya, Document Control Officer

(Print Name & Title)

(Date)

Audited by:
(EPA)

(Signature)

(Print Name & Title)

(Date)

| PAGE NOs: | | CHECK | |
|-----------|------|-------|--------|
| FROM | TO | LAB | REGION |
| 1238 | 1239 | ✓ | |
| NA | NA | ✓ | |
| 1240 | 1241 | ✓ | |
| NA | NA | ✓ | |
| 1242 | 1248 | ✓ | |
| NA | NA | ✓ | |



**284 Sheffield Street
Mountainside, NJ 07092**

SDG NARRATIVE

USEPA

SDG # MBHCX5

CASE # 51698

CONTRACT # 68HERH20D0011

SOW# SFAM01.1

LAB NAME: Alliance Technical Group, LLC

LAB CODE: ACE

LAB ORDER ID # P4496

A. Number of Samples and Date of Receipt

04 Soil and 03 Water samples were delivered to the laboratory intact on 10/23/2024.

B. Parameters

Test requested for Metals CLP Full = Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Mercury, Cyanide.

C. Cooler Temp

Indicator Bottle: Presence/Absence

Cooler: 2.2°C, 1.9°C

D. Detail Documentation (related to Sample Handling Shipping, Analytical Problem, Temp of Cooler etc):

Issue 1 : A "P" or "M" prefix was listed at the beginning of a CLP sample ID.

Issue 2: Regarding SDG MBHCX5, Laboratory QC is scheduled for ICP-AES 11+ Metals, Hg and CN analyses, but the attached COC does not list a designated sample for QC. The laboratory has selected sample MBHZC8 to use for Laboratory QC and confirms that the sample is not a blank, rinsate, or PE sample.

E. Corrective Action taken for above:

Resolution 1 : To maintain COC integrity, ASB requests no changes to the Sample IDs. The laboratory will note the issue in the SDG Narrative and proceed with the analysis of the samples.

Resolution 2: Per SFAM01.1 Exhibit A, Section 5.5.4.1., the laboratory will note the issue in the SDG Narrative and proceed with the analysis of the samples.



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F. Analytical Techniques:

All analyses were based on CLP Methodology by method SFAM01.1.

Inter Element correction factors (IECs) are determined annually and correction factor are applied during ICP-AES analysis.

G. Calculation:

Calculation for ICP-AES Soil Sample:

Conversion of Results from mg/L or ppm to mg/kg (Dry Weight Basis):

$$\text{Concentration (mg/kg)} = C \times \frac{V_f}{W \times S} \times DF$$

Where,

C = Instrument value in ppm (The average of all replicate exposures)

V_f = Final digestion volume (mL)

W = Initial aliquot amount (g) (Sample amount taken in prep)

S = % Solids / 100 (Fraction of Percent Solids)

DF = Dilution Factor

Example Calculation For Sample MBHDO5 For Antimony:

If C = 0.0083602ppm

V_f = 100 ml

W = 1.36g

S = 0.80 (80.0/100)

DF = 1

$$\text{Concentration (mg/kg)} = 0.0083602 \times \frac{100}{1.36 \times 0.80} \times 1$$

$$= 0.768400 \text{ mg/kg}$$

$$= 0.77 \text{ mg/kg (Reported Result with Signification)}$$

Calculation for ICP-AES Water Sample:

$$\text{Concentration or Result (}\mu\text{g/L)} = C \times \frac{V_f}{V_i} \times DF \times 1000$$

Where,

C = Instrument value in ppm (The average of all replicate exposures)



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Vf = Final digestion volume (mL)

Vi = Initial aliquot amount (mL) (Sample amount taken in prep)

DF = Dilution Factor

Example Calculation For Sample MBHCX5 For Arsenic:

If C = 0.0103045 ppm

Vf = 50 ml

Vi = 50 ml

DF = 1

$$\text{Concentration or Result } (\mu\text{g/L}) = 0.0103045 \times \frac{50}{50} \times 1 \times 1000$$

$$= 10.3045 \mu\text{g/L}$$

$$= 10 \mu\text{g/L (Reported Result with Signification)}$$

Calculation for Hg Soil Sample:

Conversion of Results from $\mu\text{g/L}$ or ppb to mg/kg :

$$\text{Concentration (mg/kg)} = C \times \frac{V_f}{W \times S} \times DF / 1000$$

Where,

C = Instrument response in $\mu\text{g/L}$ from the calibration curve.

Vf = Final prepared (absorbing solution) volume (mL)

W = Initial aliquot amount (g) (Fraction of Sample amount taken in prep)

S = % Solids / 100 (Fraction of Percent Solids)

DF = Dilution Factor

Example Calculation For Sample MBHDO6:

If C = 0.2518 ppb

Vf = 100 mL

W = 0.50g

S = 0.675(67.5/100)

DF = 1

$$\text{Concentration (mg/kg)} = 0.2518 \times \frac{100}{0.50 \times 0.675} \times 1 / 1000$$

$$= 0.074607 \text{ mg/kg}$$

$$= 0.075 \text{ mg/kg (Reported Result with Signification)}$$

Calculation for Hg Water Sample:



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Concentration or Result ($\mu\text{g/L}$) = $C \times \text{DF}$

Where,

C = Instrument response in $\mu\text{g/L}$ from the calibration curve.

DF = Dilution Factor

Example Calculation For Sample MBHCY6:

If $C = 0.1236$ ppb

$\text{DF} = 1$

$$\begin{aligned}\text{Concentration or Result } (\mu\text{g/L}) &= 0.1236 \times 1 \\ &= 0.1236 \mu\text{g/L} \\ &= 0.12 \mu\text{g/L} \text{ (Reported Result with Signification)}\end{aligned}$$

Calculation for CN Soil Sample:

Conversion of Results from $\mu\text{g/L}$ or ppb to mg/kg :

$$\text{Concentration (mg/kg)} = C \times \frac{V_f}{W \times S} \times \text{DF} / 1000$$

Where,

C = Instrument response in $\mu\text{g/L}$ CN from the calibration curve.

V_f = Final prepared (absorbing solution) volume (mL)

W = Initial aliquot amount (g) (Fraction of Sample amount taken in prep)

S = % Solids / 100 (Fraction of Percent Solids)

DF = Dilution Factor

Example Calculation for MBHZC8 :

If $C = 3.8196$ ppb

$V_f = 50$ ml

$W = 1.01$ g

$S = 0.833(83.3/100)$

$\text{DF} = 1$

$$\begin{aligned}\text{Concentration (mg/kg)} &= 3.8196 \times \frac{50}{1.01 \times 0.833} \times 1 / 1000 \\ &= 0.22699 \text{ mg/kg} \\ &= 0.23 \text{ mg/kg (Reported Result with Signification)}\end{aligned}$$

Calculation for CN Water Sample:



**284 Sheffield Street
Mountainside, NJ 07092**

$$\text{Concentration or Result } (\mu\text{g/L}) = C \times \frac{V_f}{V_i} \times \text{DF}$$

Where,

C = Instrument response in $\mu\text{g/L}$ CN from the calibration curve.

Vf = Final prepared (absorbing solution) volume (mL)

Vi = Initial aliquot amount (mL) (Sample amount taken in prep)

DF = Dilution Factor

Example Calculation For Cyanide:

If C = 4.1106 ppb

Vf = 50 ml

Vi = 50 ml

DF = 1

$$\text{Concentration or Result } (\mu\text{g/L}) = 4.1106 \times \frac{50}{50} \times 1$$

$$= 4.1106 \mu\text{g/L}$$

$$= 4.1 \mu\text{g/L} (\text{Reported Result with Signification})$$

H. QA/ QC

Calibrations met requirements. Interference check met requirements. Blank analyses did not indicate any presence of contamination. Laboratory Control sample was within control limits. Spike sample did meet requirements except for Antimony, Lead, Nickel, Selenium, Silver, Thallium. Duplicate sample did meet requirements except for Barium, Chromium, Lead, Magnesium, Nickel, Zinc. Serial Dilution did meet requirements except for Chromium, Iron, Manganese.

Chemical or physical interference effect was suspected and the data for all affected analytes in the sample received and associated with this serial dilution were flagged.

I certify that the data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature.

Signature _____

Name: Nimisha Pandya

Date _____

Title: Document Control Officer

From: Bett, Daisy <Daisy.Bett@gdit.com>
Sent: Thursday, October 24, 2024 1:18 PM
To: Deepak Parmar; Sohil Jodhani; Mohammad Ahmed
Cc: Leung.christina@epa.gov; Feranda, Jennifer; Brandon-Bazile, Kim; Bauer, Heather E; Johnson, Matthew; Britz, Helen; 'Moody, Brett'; Gambrah, Derrick; Patel, Bhavita; Vargas.Magda@epa.gov
Subject: Region 02 | Case 51698 | Lab ACE | Issue Insufficient/inappropriate designation of laboratory QC | FINAL
Attachments: P4496-TR.pdf

EXTERNAL EMAIL - This email was sent by a person from outside your organization. Exercise caution when clicking links, opening attachments or taking further action, before validating its authenticity.

Secured by Check Point

Good afternoon,

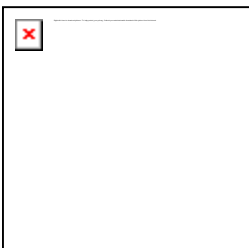
Issue: Regarding SDG MBHCX5, Laboratory QC is scheduled for ICP-AES 11+ Metals, Hg and CN analyses, but the attached COC does not list a designated sample for QC. The laboratory has selected sample MBHZC8 to use for Laboratory QC and confirms that the sample is not a blank, rinsate, or PE sample.

Resolution: Per SFAM01.1 Exhibit A, Section 5.5.4.1., the laboratory will note the issue in the SDG Narrative and proceed with the analysis of the samples.

Please note that the laboratory may contact the appropriate CLP PM should any defects need to be waived for this issue.

Thank you,
Daisy Bett
Research Analyst Associate
GDIT Federal Civilian Division
EPA Region 2&3 CLP QSS Coordinator
Under contract to the EPA

T: 571.454.0186
daisy.bett@gdit.com
15036 Conference Center Drive
Chantilly, VA 20151
www.gdit.com



Leave alert: Nov 4th - 8th

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From: Deepak Parmar <Deepak.Parmar@alliancetg.com>
Sent: Thursday, October 24, 2024 10:18 AM
To: Bett, Daisy <Daisy.Bett@gdit.com>
Subject: FW: Region 2 | Case 51698 | Lab ACE | Issue Discrepancies with tags, jars, and/or COC

This Message Is From an External Sender

Please use caution with links, attachments, and any requests for credentials.

Thanks & Regards,



Deepak Parmar
QA/QC
An Alliance Technical Group Company
Main: 908-789-8900
Address: 284 Sheffield St, Ste 1, Mountainside, NJ 07092
www.alliancetg.com    

From: Deepak Parmar
Sent: Thursday, October 24, 2024 10:16 AM
To: Zakari, Makki <Makki.Zakari@gdit.com>
Subject: Region 2 | Case 51698 | Lab ACE | Issue Discrepancies with tags, jars, and/or COC

Good morning,

Issue 1 : One SDG MBHCX5 is open without lab QC for ICP-AES,CN and HG analysis However, a sample was not designated for Laboratory QC. Lab like to use sample MBHXC8 for Lab QC. these samples are not blanks, rinsates or PE samples. All sample mentioned on COC for QC already use for other SDGs . Case complete.

Please see attachment for your reference.

Thanks & Regards,



Deepak Parmar
QA/QC
An Alliance Technical Group Company
Main: 908-789-8900
Address: 284 Sheffield St, Ste 1, Mountainside, NJ 07092



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 10/25/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 16:40
In Date: 10/24/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:14
Out Date: 10/25/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB133114

| Lab ID | Client SampleID | Dish # | Dish Wt (g) (A) | Sample Wt (g) | Dish + Sample Wt (g) (B) | Dish+Dry Sample Wt (g) (C) | % Solid | Comments |
|----------|-----------------|--------|-----------------|---------------|--------------------------|----------------------------|---------|----------|
| P4496-04 | MBHDO5 | 1 | 1.14 | 8.68 | 9.82 | 8.08 | 80.0 | |
| P4496-05 | MBHDO6 | 2 | 1.15 | 8.82 | 9.97 | 7.1 | 67.5 | |
| P4496-06 | MBHZC7 | 3 | 1.18 | 8.53 | 9.71 | 8.26 | 83.0 | |
| P4496-07 | MBHZC8 | 4 | 1.17 | 8.56 | 9.73 | 8.3 | 83.3 | |
| P4496-08 | MBHZC8D | 5 | 1.17 | 8.56 | 9.73 | 8.3 | 83.3 | |
| P4496-09 | MBHZC8S | 6 | 1.17 | 8.56 | 9.73 | 8.3 | 83.3 | |

$$\% \text{ Solid} = \frac{(C-A) * 100}{(B-A)}$$

WORKLIST(Hardcopy Internal Chain)

133114

WorkList Name : %1-p4496 WorkList ID : 184749 Department : Wet-Chemistry Date : 10-24-2024 16:13:09

| Sample | Customer Sample | Matrix | Test | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method |
|----------|-----------------|--------|----------------|--------------|----------|-----------------------------------|--------------|--------------|
| P4496-04 | MBHDO5 | Solid | Percent Solids | Cool 4 deg C | USEP01 | Q51 | 10/18/2024 | Chemtech -SO |
| P4496-05 | MBHDO6 | Solid | Percent Solids | Cool 4 deg C | USEP01 | Q51 | 10/18/2024 | Chemtech -SO |
| P4496-06 | MBHJC7 | Solid | Percent Solids | Cool 4 deg C | USEP01 | Q51 | 10/18/2024 | Chemtech -SO |
| P4496-07 | MBHJC8 | Solid | Percent Solids | Cool 4 deg C | USEP01 | Q51 | 10/18/2024 | Chemtech -SO |
| P4496-08 | MBHJC8D | Solid | Percent Solids | Cool 4 deg C | USEP01 | Q51 | 10/18/2024 | Chemtech -SO |
| P4496-09 | MBHJC8S | Solid | Percent Solids | Cool 4 deg C | USEP01 | Q51 | 10/18/2024 | Chemtech -SO |

Date/Time 10/24/24 16:20
Raw Sample Received by: [Signature]
Raw Sample Relinquished by: [Signature]

Date/Time 10/24/24 16:55
Raw Sample Received by: [Signature]
Raw Sample Relinquished by: [Signature]